DOCKET NO.: 301561.1 / MSFT-1745
Application No.: 10/602,497
Office Action Dated: June 15, 2006

PATENT
AMENDMENTS AND ARGUMENTS IN SUPPORT
OF PATENTABIILTY OF THE CLAIMS
PURSUANT TO 37 CFR § 1.114

REMARKS

Upon entry of the present amendment, claims 1-4, 6-11 and 13-20 will be pending in this application. Claims 1-20 stand rejected under 35 U.S.C. § 112, second paragraph, as being allegedly indefinite. Claims 1-6 and 8-13 stand rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by "Continual Queries for Internet-Scale Event Driven Information Delivery" ("Liu"). Claims 7 and 14-20 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Liu in view of United States Patent No. 6,321,236 ("Zollinger"). Applicants respectfully traverse the rejections.

Interview Summary

Applicants' undersigned representative, Mr. Eiferman, and Examiner Morrison participated in a telephonic interview on July 6, 2006, during which Mr. Eiferman proposed the above claim amendments. Examiner Morrison stated that the above claim amendments appeared to overcome the rejections of record.

Rejections under 35 U.S.C. § 112

Claims 1-20 stand rejected under 35 U.S.C. § 112, second paragraph, as being allegedly indefinite. Independent claims 1, 8 and 15 are hereby amended to remove allegedly indefinite terms such as "if." Accordingly, reconsideration and withdrawal of the 35 U.S.C. § 112 rejections are respectfully requested.

Rejections under 35 U.S.C. § 102

Claims 1-6 and 8-13 stand rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by "Continual Queries for Internet-Scale Event Driven Information Delivery" ("Liu"). Applicants respectfully disagree and traverse.

The claimed invention is directed to database change notification. In an embodiment of the claimed invention, a client can subscribe to a first subset of a database, thereby entitling the client to receive notifications *before* the first subset of the database is changed. To determine when this happens, the query plans of incoming queries are supplemented with a subscription plan, and the resulting supplemented plan is evaluated to determine whether its

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subsequent execution on the underlying database by the execution engine will result in any changes to the first subset of the database. If so, then a change notification is sent to the client. (Application, Summary of the Invention).

Liu is directed to "continual" queries. A continual query is a query that is re-performed *after* every occurrence of a corresponding trigger event. The triggering event must occur prior to the re-performance of the query because the re-performance of the query provides actual updated results (rather than simply a notification of a subsequent update) to a client. (Liu, Pg. 612, Col. 2, ¶ 3). To detect when the trigger event has occurred, the database may be periodically polled or triggers may be set to fire after the database is changed.

Accordingly, Liu does not teach or suggest the following features of claims 1 and 8:

> prior to executing the supplemented query plan, evaluating the supplemented query plan whereby the subscription filters the first subset of data from within the second subset of data to form a third subset of data;
> determining based on the third set of data whether or not to generate a notification of the change to the third subset of data such that the notification is generated when the third subset of data is non-empty, and the notification is not generated when the third set of data is empty; and
> after evaluating the supplemented query plan, executing the query by changing the second subset of data.

Thus, Applicants respectfully submit that independent claims 1 and 8 are not anticipated by Liu. Applicants further submit that claims 2-4, 6, 9-11 and 13 are patentable at least by reason of their dependency. Applicants further note that claims 5 and 12 are hereby cancelled. Accordingly, reconsideration and withdrawal of the 35 U.S.C. § 102 rejections are respectfully requested.

Rejections under 35 U.S.C. § 103

Claims 7 and 14-20 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Liu in view of United States Patent No. 6,321,236 ("Zollinger"). Applicants respectfully disagree and submit that, for at least the reasons described above, independent claim 15 is patentable over the cited references. Applicants further submit that

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claims 7, 14 and 16-20 are patentable at least by reason of their dependency. Accordingly, reconsideration and withdrawal of the 35 U.S.C. § 103 rejections are respectfully requested.
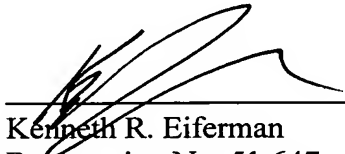
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CONCLUSION

Applicants respectfully submit that the present application is in condition for allowance. Applicants respectfully submit that no new matter is added in the forgoing amendments. Applicants respectfully request reconsideration of the present application.

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